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IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with strikethrough. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claims 3, 10-17, 26-32, 37 and 38 and AMEND claims 1 and 4 in accordance with the following:

1.   (Currently Amended) A pattern drawing apparatus for forming exposure patterns, that have a mirror image relationship to each other with respect to a substrate, on both sides of the substrate, comprising:

maskless exposure means for forming the exposure patterns on both sides of the substrate by masklessly exposing both sides of the substrate in accordance with prescribed data-;

detecting means for detecting a displacement from the mirror image relationship of the exposure patterns by using a test substrate on both sides of which the exposure patterns are formed by the maskless exposure means; and

correcting means for correcting exposure data based on the displacement detected by the detecting means so that the mirror image relationship will be maintained between the exposure patterns when the exposure patterns are formed on both sides of the substrate by maskless exposure by the maskless exposure means in accordance with the exposure data.

2.   (Original) A pattern drawing apparatus as claimed in claim 1, wherein the maskless exposure means includes exposure heads arranged facing each other, and wherein

the substrate is placed with each side thereof facing a corresponding one of the exposure heads so that both sides of the substrate are masklessly exposed.

3.   (Cancelled)

4.   (Currently Amended) A pattern drawing apparatus as claimed in claim 3 1, wherein the detecting means includes a developing means for developing both sides of the test substrate after maskless exposure, and wherein

the detecting means detects the displacement from the mirror image relationship by reading the exposure patterns that are formed on both sides of the test substrate by the developing means.

5.   (Original) A pattern drawing apparatus as claimed in claim 4, wherein the detecting means includes:

image capturing means for capturing images on the test substrate from one side thereof; and

control means for controlling the test substrate in such a manner as to block light during the exposure by the exposure means and to transmit light during the image capturing by the image capturing means.

6.   (Original) A pattern drawing apparatus as claimed in claim 5, wherein the test substrate comprises a liquid crystal panel having a structure such that light projected from an exposure light source is prevented from being transmitted through the liquid crystal panel during the exposure by the exposure means, and such that transmittance to inspection light is high during the image capturing by the image capturing means.

7.   (Original) A pattern drawing apparatus as claimed in claim 4, wherein the detecting means includes an image capturing means for capturing images on the test substrate from one side thereof, and wherein

the test substrate blocks light during the exposure by the exposure means and transmits light during the image capturing by the image capturing means.

8.   (Original) A pattern drawing apparatus as claimed in claim 7, wherein the test substrate comprises a liquid crystal panel having a structure such that light projected from an exposure light source is prevented from being transmitted through the liquid crystal panel during the exposure by the exposure means, and such that transmittance to inspection light is high during the image capturing by the image capturing means.

9.   (Original) A pattern drawing apparatus as claimed in claim 1, wherein the exposure patterns are lead patterns of a leadframe member.

10.   (Cancelled)

11.   (Cancelled)

12.   (Cancelled)

13.   (Cancelled)

14.   (Cancelled)

15.   (Cancelled)

16.   (Cancelled)

17.   (Cancelled)

18.   (Original) A pattern drawing method for forming exposure patterns that have a mirror image relationship to each other with respect to a substrate on both sides of the substrate, comprising:

a test exposure step for forming test exposure patterns on both sides of a test substrate by masklessly exposing both sides of the test substrate by using a maskless exposure means;

a detection step for detecting a displacement from the mirror image relationship of the test exposure patterns by using the test substrate on both sides of which the test exposure patterns are formed by the maskless exposure means;

a correction step for correcting exposure data based on the displacement detected in the detecting step so that the mirror image relationship will be maintained between the exposure patterns when the exposure patterns are formed on both sides of the substrate by maskless exposure by the maskless exposure means in accordance with the exposure data; and

a production exposure step for forming the exposure patterns on both sides of the substrate by performing maskless exposure using the maskless exposure means, based on the corrected exposure data obtained in the correction step.

19.   (Original) A pattern drawing method as claimed in claim 18, wherein the maskless exposure means includes exposure heads arranged facing each other, and wherein

the substrate is placed with each side thereof facing a corresponding one of the

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exposure heads so that both sides of the substrate are masklessly exposed.

20.   (Original) A pattern drawing method as claimed in claim 18, wherein the detection step includes a developing step for developing both sides of the test substrate after the test exposure step, and wherein

the displacement from the mirror image relationship is detected by reading the exposure patterns that are formed on both sides of the test substrate in the developing step.

21.   (Original) A pattern drawing method as claimed in claim 20, wherein the detecting step includes:

an image capturing step for capturing images on the test substrate from one side thereof; and

a control step for controlling the test substrate in such a manner as to block light during the exposure in the test exposure step and to transmit light during the image capturing in the image capturing step.

22.   (Original) A pattern drawing method as claimed in claim 21, wherein the test substrate comprises a liquid crystal panel having a structure such that light projected from an exposure light source is prevented from being transmitted through the liquid crystal panel during the exposure in the test exposure step, and such that transmittance to inspection light is high during the image capturing in the image capturing step.

23.   (Original) A pattern drawing method as claimed in claim 20, wherein the detecting step includes an image capturing step for capturing images on the test substrate from one side thereof, and wherein

the test substrate blocks light during the exposure in the test exposure step and transmits light during the image capturing in the image capturing step.

24.   (Original) A pattern drawing method as claimed in claim 23, wherein the test substrate comprises a liquid crystal panel having a structure such that light projected from an exposure light source is prevented from being transmitted through the liquid crystal panel during the exposure in the test exposure step, and such that transmittance to inspection light is high during the image capturing in the image capturing step.

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25.   (Original) A pattern drawing method as claimed in claim 18, wherein the exposure patterns are lead patterns of a leadframe member.

26.   (Cancelled)

27.   (Cancelled)

28.   (Cancelled)

29.   (Cancelled)

30.   (Cancelled)

31.   (Cancelled)

32.   (Cancelled)

33.   (Original) A test apparatus for use in a pattern drawing apparatus for forming exposure patterns that have a mirror image relationship to each other with respect to a substrate on both sides of the substrate; comprising

maskless exposure means, having exposure heads arranged facing each other, for masklessly exposing both sides of the substrate by sandwiching the substrate to be exposed between the exposure heads;

a test substrate that blocks or transmits light, and on both sides of which test exposure patterns are formed by maskless exposure using the maskless exposure means;

developing means for developing both sides of the test substrate on which the test exposure patterns have been formed by exposure;

image capturing means for capturing images on the test substrate from one side thereof after the exposure patterns have been formed thereon by the developing means;

control means for controlling the test substrate in such a manner as to block light during the exposure by the exposure means and to transmit light during the image capturing by the image capturing means; and

detecting means for detecting a displacement from the mirror image relationship of the test exposure patterns on the test substrate, based on the images captured by the image

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capturing means.

34.   (Original) A test apparatus as claimed in claim 33, wherein the test substrate has a structure such that light projected thereon is prevented from being transmitted therethrough during the exposure by the exposure means, and such that transmittance to inspection light is high during the image capturing by the image capturing means.

35.   (Original) A test apparatus as claimed in claim 33, wherein the test substrate comprises a liquid crystal panel having a structure such that light projected thereon is prevented from being transmitted therethrough during the exposure by the exposure means, and such that transmittance to inspection light is high during the image capturing by the image capturing means.

36.   (Original) A test apparatus as claimed in claim 33, further comprising correcting means for correcting exposure data based on the displacement detected by the detecting means so that the mirror image relationship will be maintained between the exposure patterns when the exposure patterns are formed on both sides of the substrate by maskless exposure by the maskless exposure means in accordance with the exposure data.

37.   (Cancelled)

38.   (Cancelled)